4. On the Names to be applied to certain Echinoidea. By F. JEFFREY BELL, B.A., F.Z.S.

[Received March 10, 1880.]

The tone which Prof. Agassiz has thought proper to adopt towards me makes any further discussion of the synonymy of the Echini impossible between us. It is, however, necessary that I should notify the Society of one or two matters lest my co-fellows should be led to think, from the accusations that have been brought against me,

that I have been guilty of great disrespect towards it.

I am charged, first, with quibbling, and, secondly, with misrepresentation. In truth, however, the sentence which forms the basis for the first accusation is obviously a dialectic artifice, by means of which the chief point under discussion is thrown into sharper That point is, of course, the necessity for starting with Linnæus in our nomenclature; whenever that salutary rule is disobeyed an author can hardly escape some pitfall, and into such a pitfall Prof. Agassiz has fallen.

While I owe to every author whom I may quote the utmost exactness in representation, I owe it no less to the Society who did me the honour to publish my paper, and to the student who reads it. I shall not so far forget my own dignity as to plead that I intended no misrepresentation; I will say at once that I have not been guilty

of it, and that Prof. Agassiz does not support his accusation.

In criticizing the method of bibliographical reference adopted by the author of the 'Revision,' I directed attention to a misleading reference which stands thus:-" Int. Mon. Scut." This is now allowed to be an unfortunate method of quotation; but "it does not justify Mr. Bell in assuming that he corrects a grave error, and gives information not to be found in the Revision." Here I submit the following facts:—

(1) The following are the contents of the second livraison of the 'Monographies d'Echinodermes,' as published by Prof. Louis Agassiz -(a) Observations on the progress of the knowledge of the Echinodermata, and (B) the "Seconde Monographie. Des Scutelles." The Monograph consists of (i) a short preface, (ii) "Introduction. Du groupe des Scutelles en général," and (iii) a series of chapters on

the different genera of the group.

Now which of these constituent parts is referred to by "Int. Mon. Scut."? why, of course, as all the world but Mr. Bell knows quite well, the 'Observations . . .' are referred to! That there is an Introduction to the Scutellæ has, it is notorious, been at no time an obstacle to such a use of the abbreviated reference. That this is really the case should be obvious from Mr. Agassiz's statement-"All writers on Echinoderms who have quoted these independent monographs (as I have done in the 'Revision') without reference to the number of the Livraison, but entirely from the contents as printed on the cover, always quote this 'essay' as 'Monographie des Scutelles (Introduction).' I have only followed their example and

that of Prof. Agassiz himself."

If by this Mr. Alexander Agassiz only means that those who do not quote it as the second livraison, quote it by its titlepage, I submit that such an answer is a mere trifling with the Zoological Society; but if he means that such is the ordinary method of referring to the 'Observations' &c., (and that he does mean or aim at meaning this is probable from his preceding statement that Prof. Louis Agassiz "invariably spoke of it as 'l'Introduction de la Mono-

graphie des Scutelles'") I can pass to

(2) The mode of reference adopted by other writers. Mr. Alexander Agassiz states that his father invariably spoke of it in one way; of course, as an answer, Mr. Agassiz means that there are printed references to the 'Observations' in which the abbreviation adopted by himself in his 'Revision' is used. There may be such, but I am not acquainted with them, although I can point to five genera in the 'Nomenclator' in which a different method of reference is adopted. Let the reader turn to Amblypneustes, Pleurechinus, Temnopleurus, Agarites, or Tetrapygus, and he will "invariably" find succeeding these names the expression "Agass. Monogr. Echin. 2de livr. 1841." Turning now to other witnesses, I will call on two honoured names: one was, with Louis Agassiz, the author of the 'Catalogue Raisonné,' and he 1 writes Monogr. d'Échinodermes, 2e livre. p. 7; the other is Alex. Agassiz's eminent compatriot A. E. Verrill, who (s. v. Euryechinus) writes, on p. 304 of his 'Notes on the Radiata in the Museum of Yale College' (1867), "Agassiz, Monogr. d'Échinod. 2me livr. (Introduction), July 1841."

It is of no use to appeal to the 'Catalogue Raisonné' (1846, 1847), for the essay in question is not there referred to; nor is there, to my knowledge, any reference to it in such considerable authors as Lütken2, Von Martens, Perrier, or Dujardin and Hupé. The Society will now see how far Prof. Agassiz is justified in his term "all," and in his

adverb "invariably.

(3) Contents of the "Essay." Even now I am not certain that Mr. Alex. Agassiz and I are referring to the same paper. It is true that we both refer to an article published under the same cover as the Monograph of the Scutellidæ, that we both quote the title ('Observations . . .') in just the same way, and that we both find on a given page just the same generic names; and yet we differ completely as to its other contents and as to its aim. The basis of my contention obviously laid in the fact that I looked upon the 'Observations' as having a general interest, and as being, therefore, incorrectly denominated by the term "Int. Mon. Scut."; we learn now, however, from unquestionable authority, that "the contents of this so-called essay, in spite of the heading, show plainly enough that it was not considered at the time as a special essay, but that it was simply an Introduction to the Livraison." Now is the rest of

Desor, 'Synopsis des Echinides fossiles,' p. 113.
Save this, "1841 opstillede Agassiz (Préface) imidlerted en Række af Slaegter..." (Vidensk. Meddel. 1864, p. 154).

the livraison confined to the Scutellidæ? certainly it is, and Prof. Alex. Agassiz most explicitly says so; but what does the "so-called" Introduction deal with? In the space of 20 pages reference is made to (not to quote all) Forbes's 'British Starfishes' (itself a general work on Echinoderms), the classifications proposed by Müller and Troschel and by J. E. Gray for the Asterida, to M. Desmoulins's Studies on the Echinida, to Brandt's establishment of certain genera of regular Echini, to the same writer's classification of the Holothurians, to Grube's anatomy of Sipunculus, to Sars's researches into the development of Asterias, to J. Müller's labours on Pentacrinus, as well as to various memoirs on fossil forms.

(4) The genus Tripneustes is not defined in the essay referred to,

but the type only mentioned as E. ventricosus.

(5) In the Introduction to Valentin's anatomy of Echinus the

genus is well defined (p. viii).

(6) Notwithstanding certain cases to the contrary, I prefer to believe that, in the case of Tripneustes at any rate, L. Agassiz justly referred in the 'Nomenclator' to the paper in which he amply defined

and so, strictly speaking, published that generic name.

There are two other statements of mine which it is not just to denounce as misrepresentations, for they both arise from my fundamental proposition that, in zoological nomenclature, names which antedate Linnæus do not exist; thus variegata gets put out of court, and 1788, not 1734, is, with me, the date of unicolor.

April 6, 1880.

Prof. W. H. Flower, LL.D., F.R.S., President, in the Chair.

The Secretary read the following extracts from two letters of Mr. Arthur E. Brown, Superintendent of the Gardens of the Zoological Society of Philadelphia, U.S.A., relating to the birth of an Elephant, which had taken place on the 10th ult. in Cooper and Bailey's menagerie at Philadelphia. These letters had been addressed to Mr. W. A. Conklin, C.M.Z.S., of New York, and had been kindly communicated to the Secretary by that gentleman.

"The baby Elephant was born only on Wednesday morning; is a female, strong and healthy, and I see no reason why they should not successfully rear it. They have another female which they say is eight months gone with young; and from examination I am inclined

to think this is the case.

"Our Prosector, Dr. Chapman, was fortunate enough to obtain the placenta in perfect condition; the only other one known, I believe, is an imperfect specimen in the Royal College of Surgeons, London, sent in spirit from India. It is a good thing that this one has fallen into perfectly competent hands. The baby is a lively, interesting little thing, about two feet high, weight 213 pounds (an hour after birth), and is well worth seeing.